

# CHAPTER 1

## INTRODUCTION

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### 1.1 INTRODUCTION

The following Wastewater Master Plan provides a comprehensive review and evaluation of the City of Chula Vista's wastewater collection, conveyance, and treatment capacity requirements under existing and ultimate City buildout conditions. Based on findings of the evaluation, the Plan recommends facility improvements and financing alternatives to ensure that aging infrastructure remains serviceable and to allow for the continued buildout of the City's General Plan.

The Master Plan is presented in nine chapters:

- Chapter 1 is an introduction to the project
- Chapter 2 presents an overview of the study area, sewer drainage basins, and existing wastewater collection facilities
- Chapter 3 provides estimates of future wastewater generation rates and treatment capacity requirements
- Chapter 4 presents the methodology and findings of the sewer capacity evaluation, including summaries of hydraulic computer models used to quantify future flow conditions
- Chapter 5 summarizes projected impacts to the existing collection system from implementation of alternative General Plan land use amendments
- Chapter 6 presents findings of existing pump station assessments and recommended facility improvements
- Chapter 7 provides a review of the City's current sewer design criteria and emergency response procedures
- Chapter 8 presents a recommended, multi-year Capital Improvement Program
- Chapter 9 includes a capacity fee analysis and capital facilities financing plan

### 1.2 BACKGROUND

The City of Chula Vista is located in southwestern San Diego County, approximately seven miles north of the international border with Mexico. Incorporated in 1911, the City encompasses over 50 square miles as shown in Figure 1-1. Chula Vista is one of the fastest growing

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communities in the State of California – the San Diego Association of Governments (SANDAG) projects that Chula Vista's population will increase from approximately 200,000 people today to nearly 300,000 by the year 2020.

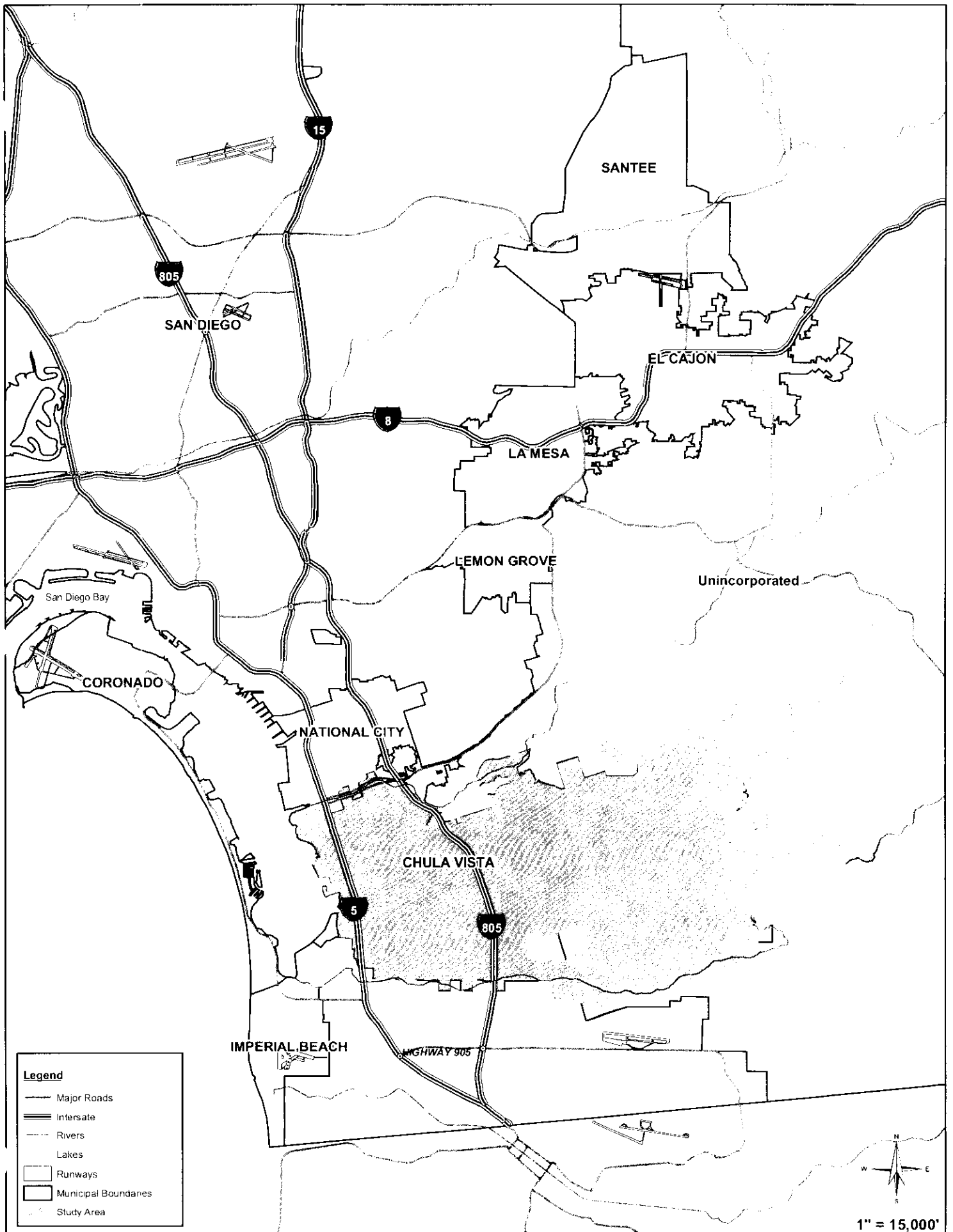
Prior to the 1970s, the City of Chula Vista had expanded from central Chula Vista and the bay front area into small ranches and orchards to the south and east, now identified as the Montgomery and Sweetwater planning areas. As the San Diego metropolitan region began to grow at an increasing rate in the late 1970s and early 1980s, there was greater pressure placed on Chula Vista to consider major expansion of its boundaries. This expansion included large undeveloped ranch lands to the east, designated as the Eastern Territories in the City's General Plan. Recent growth has occurred east of Interstate 805 within the master-planned developments of Rancho Del Rey, EastLake, Rolling Hills Ranch, Sunbow, San Miguel Ranch and Otay Ranch. Substantial buildout of the City is expected to occur over the next 20 years.

The City completed an update to the General Plan in 1989 that focused primarily on planning for new growth in the Eastern Territories. With detailed planning significantly complete in the developing eastern portions of the City, the City is currently underway with the preparation of another General Plan Update with particular attention to redevelopment and in-fill development in the older portions of the City located generally west of Third Avenue. The City last prepared a Wastewater Master Plan in conjunction with development of the 1989 General Plan Update. To address land use changes that have occurred in the ensuing years and to evaluate future land use changes proposed in the current General Plan Update, the City has commissioned the preparation of this comprehensive Wastewater Master Plan.

The City provides sanitary sewer service for all areas within the City limits and owns, operates, and maintains approximately 430 miles of sewer main lines and 12 sewer pump stations. City collection facilities convey wastewater flows generated within 8 drainage basins to connections to regional sewerage facilities located along San Diego Bay to the west and the Sweetwater River to the north. Flows are ultimately conveyed to transmission and treatment facilities operated by the City of San Diego's Metropolitan Wastewater Department (METRO). Currently the City owns capacity rights of 19.843 million gallons per day (mgd) within the METRO system.

### 1.3 PURPOSE

The Purpose of the Wastewater Master Plan is to evaluate system capacity, assess the condition of existing pump station facilities, develop a capital improvement plan (CIP) for rehabilitation and expansion of the collection system, and recommend a revised capacity charge. Specific recommendations are made for the repair, upgrading, and buildout of wastewater collection and pumping facilities. The 20-year CIP includes the recommended system improvements to address existing and projected capacity constraints as well as the acquisition of additional regional treatment capacity. This recommended CIP forms the basis for the updated capacity fee and capital facilities financing plan and will be used in sewer rate evaluations to be completed in separate financial studies.



## **1.4 ENVIRONMENTAL REGULATIONS AND FINANCIAL REPORTING**

Environmental regulations regarding sewer overflows are becoming increasingly stringent. The Environmental Protection Agency (EPA) proposes to expand agency requirements for municipal wastewater collection systems including requirements for the implementation of capacity, management, operations, and maintenance (CMOM) programs to reduce the occurrence, or likelihood of occurrence of sewer overflows. This will require municipalities to establish and outline programs to better manage, operate, and maintain their wastewater collection systems and also to investigate and understand the capacity needs of their systems. The infrastructure review included in this report provides an evaluation of the condition and capacity of the system that can be used as a basis for the specific requirements of the CMOM programs.

With the recent implementation by the City of asset reporting procedures mandated by Governmental Accounting Standards Board Statement No. 34 (GASB-34) and adoption of many of the CMOM provisions, the City of Chula Vista is taking an important step to identifying its sewer collection needs with the preparation of this Wastewater Master Plan.

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